

Remarks/Arguments:

By this Amendment, Applicants have amended claims 1 and 48. Claims 1-8, 10, 12-15, 19-23, 37, 38 and 48 are pending.

Drawing Objections

The drawings are objected to as being "improperly crosshatched". Applicants attach amended Figures 1-5, which have been properly crosshatched.

Claim Rejections Under Sections 102 and 103

Claims 1-3, 6 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Tsukada; claims 48, 10, 12-15, 19 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Tsukada; claims 4, 5 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsukada; claims 20, 21 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsukada; claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsukada in view of Pellegrino; and claim 23 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsukada in view of Pellegrino. By this Amendment, applicants have traversed the Section 102(b) and Section 103(a) rejections.

Claim 1 is an independent claim with claims 2-8 and 37 depended thereon. Claim 48 is an independent claim with claims 10, 12-15, 19-23 and 38 dependent thereon.

Turning first to independent claim 1, it is directed to a printed circuit board for use in an electronic device package and includes the following element:

- a substrate layer comprising impregnated glass fibers,
- a non-conductive layer comprising a dielectric material free of continuous glass fibers applied to the substrate layer,
- an electrically conductive circuitry comprising a conductive material **encapsulated by the non-conductive layer** such that the non-conductive layer lies between the substrate layer and the conductive material to prevent shorts therebetween caused by migration of the conductive material along the glass fibers.

Applicants respectfully submit that the printed circuit board of claim 1 is patentably distinguished from both the Tsukada and Pellegrino Patents based on the requirement that the electrically conductive circuitry is encapsulated by the non-conductive layer. Applicants respectfully submit that this is not the addition of new matter but is based on the application as originally filed; see for example, page 5, line 26 of the originally filed application.

The Tuskada Patent has been asserted against claim 1 based on the multilayer printed circuit board shown in Figures 1A-1J. In particular, the Examiner has pointed out insulating substrate 10, electrically insulating material 18, insulating layer 28, and power supply conductor 44. But Applicants note that the power supply conductor 44 is not "encapsulated" by a non-conductive layer as required by Applicants' claim 1. Thus the Tsukada Patent can neither anticipate nor render obvious the printed circuit board of claim 1.

The Pellegrino Patent in general relates to fabrication of a printed circuit board blank having a predetermined pattern of pads and interconnecting conductive pathways. In particular, the Examiner notes with respect to the Pellegrino Patent a prepreg comprising a glass fabric impregnated with epoxy resin. But nowhere in the Pellegrino Patent is there any teaching or suggestion of an electrically conductive circuitry being encapsulated by a non-conductive layer as set forth in claim 1, to which claims 2-8 and 37 depend.

Independent claim 48 has been amended in a similar fashion as claim 1. Thus all pending claims include the requirement of the electrically conductive circuitry being encapsulated by the non-conductive layer. Because this feature is neither taught nor suggested in the Tuskada and Pellegrino Patents, Applicants request that the Section 102(b) and Section 103(a) rejections be withdrawn.

Based on the foregoing remarks and amendment, Applicants respectfully submit that claims 1-8, 10, 12-15, 19-23, 37, 38 and 48 are in condition for allowance. Reconsideration and allowance of all pending claims are respectfully requested.

Respectfully submitted,

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Attachments: Figures 3-6 (2 sheets)

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